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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,307	12/23/2005	Johan Adriaan Martens	50304/107001	3753
21559	7590	09/22/2008		
CLARK & ELBING LLP 101 FEDERAL STREET BOSTON, MA 02110			EXAMINER SILVERMAN, ERIC E	
			ART UNIT 1618	PAPER NUMBER
			NOTIFICATION DATE 09/22/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentadministrator@clarkelbing.com

Office Action Summary

Application No.

10/562,307

Applicant(s)

MARTENS ET AL.

Examiner

ERIC E. SILVERMAN

Art Unit

1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 100-119 is/are pending in the application.
- 4a) Of the above claim(s) 109-119 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 100-108 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
Paper No(s)/Mail Date 2/26/08, 1/23/06, 12/3/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, claims 100-108 in the reply filed on 6/30/2008 is acknowledged.

Claims 109-119 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/30/2008.

Pursuant to the election, claims 100-119 are pending, claims 109-119 are withdrawn, and claims 100-108 are treated on the merits in this action.

Claim Objections

Claim 106 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 106 depends on claim 100. Claim 100 is drawn to a crystalline mesoporous silica material, and is not drawn to a method of making said material or a method of performing measurements on said material. Claim 105 does not further define any property or structural, functional or compositional element, but requires that a powder X-ray diffraction be preformed after a given step. Thus, claim 105 seeks to modify the product of claim 100 by requiring specific steps to be taken to measure a property of the product. Claim 100 is drawn to a product, not to a method of measuring.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 106 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 106 recites the limitation "said tetrapropylammonium-ion and said cationic surfactant or triblock copolymer molecule" in claim 100. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 100-108 are rejected under 35 U.S.C. 102(b) as being anticipated by Kirschhook et al. in *Angew. Chem. Int. Ed.* 2001 (hereafter "Kirschhook").

Kirschhook teaches nanoslabs formed from silicalite-1 zeolite framework. The nanoslabs are formed from tetrapropylammonium hydroxide mediated synthesis. They self-assemble into the claimed material in the presence of, for example sodium ions (Figure 6). The claimed material is formed through "coalescence of elementary nanoslabs." (pg. 2638, right hand column). Kirschhook describes the process as "self-organization of identical nanoscopic zeolite particles....[into] nanoslabs [which] combine to form tablets and MFI-type zeolite crystals." (pg. 2637, right hand column) The individual slabs lack any peak at a spacing of less than 1.5 nm in SAXS powder

diffraction (Figure 5), and thus are free of Bragg type diffraction in powder X-ray diffraction pattern. Steps such as filtration of suspensions of the product are understood to meet the limitation of "removing said tetrapropylammonium-ion" in claim 108. The tetrapropyl ammonium hydroxide is a cationic surfactant (tetrapropyl ammonium being a cation), and is present in some self-assembly experiments (page 2638-39), meeting the requirements for assembling said nanoslabs through interaction with a cationic surfactant in claim 107. Figure 6 appears to show nanoslabs linked by their corners, edges, or faces. The required "two or more levels of porosity" is not measured (no measurements relating to porosity in different domains are performed in Kirschhook), but this is understood to be an inherent property of the product.

Conclusion

No claims area allowed

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC E. SILVERMAN whose telephone number is (571)272-5549. The examiner can normally be reached on Monday to Thursday 7:00 am to 5:00 pm and Friday 7:00 am to noon.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571 272 0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric E Silverman/
Examiner, Art Unit 1618

Application/Control Number: 10/562,307
Art Unit: 1618

Page 5